DOCUMENT RESUME

ED 441 611 PS 028 629

AUTHOR	Rochow, K. W. James; Rapuano, Maria
TITLE	Childhood Lead Poisoning: Blueprint for Prevention.
INSTITUTION	Alliance to End Childhood Lead Poisoning, Washington, DC.
SPONS AGENCY	Environmental Protection Agency, Washington, DC.
PUB DATE	1993-00-00
NOTE	37p.; For related documents on childhood lead poisoning, see PS 028 630-631.
AVAILABLE FROM	Alliance to End Childhood Lead Poisoning, 227 Massachusetts Avenue, N.E., Suite 200, Washington, DC 20002 ($4; $3 per copy for orders over 10).
PUB TYPE	Guides - Non-Classroom (055) -- Opinion Papers (120)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Change Strategies; Child Health; *Children; *Lead Poisoning; Legal Responsibility; *Prevention; Program Design; Risk Management; Special Health Problems

ABSTRACT

Current programs to deal with childhood lead poisoning, the primary environmental disease of U.S. children, screen individual children, treat those with serious cases of lead poisoning, and subsequently return children to hazardous environments. This approach has led to repeated diagnoses of lead poisoning. This handbook is designed to convince state and local decisionmakers to develop, fund, and sustain childhood lead poisoning prevention programs. The first of a 3-volume set intended to provide a framework to catalyze action to develop effective childhood lead poisoning prevention programs, the handbook describes pathways of lead exposure and its effects on children, presents myths versus facts with regard to childhood lead poisoning, and discusses the liability of states and cities with regard to lead poisoning. The handbook also sets forth the compelling arguments why it is in everyone's interest to move to preventive programs, including the protection of generations of children and improvement of the quality of life and productivity of the individual child. The handbook then outlines seven elements of an effective prevention program: (1) assessing the childhood lead poisoning prevention problem in each community; (2) educating the public about prevention; (3) coordinating public sector lead-related programs; (4) building constituencies through community outreach; (5) increasing capacity for lead hazard control; (6) prioritizing lead hazard control; and (7) leveraging private sector resources. The handbook concludes with a list of resources for prevention programs, including federal initiatives, state programs, and private capital. (KB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 441 611

PS 028629

Childhood LEAD POISONING: Blueprint for PREVENTION

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

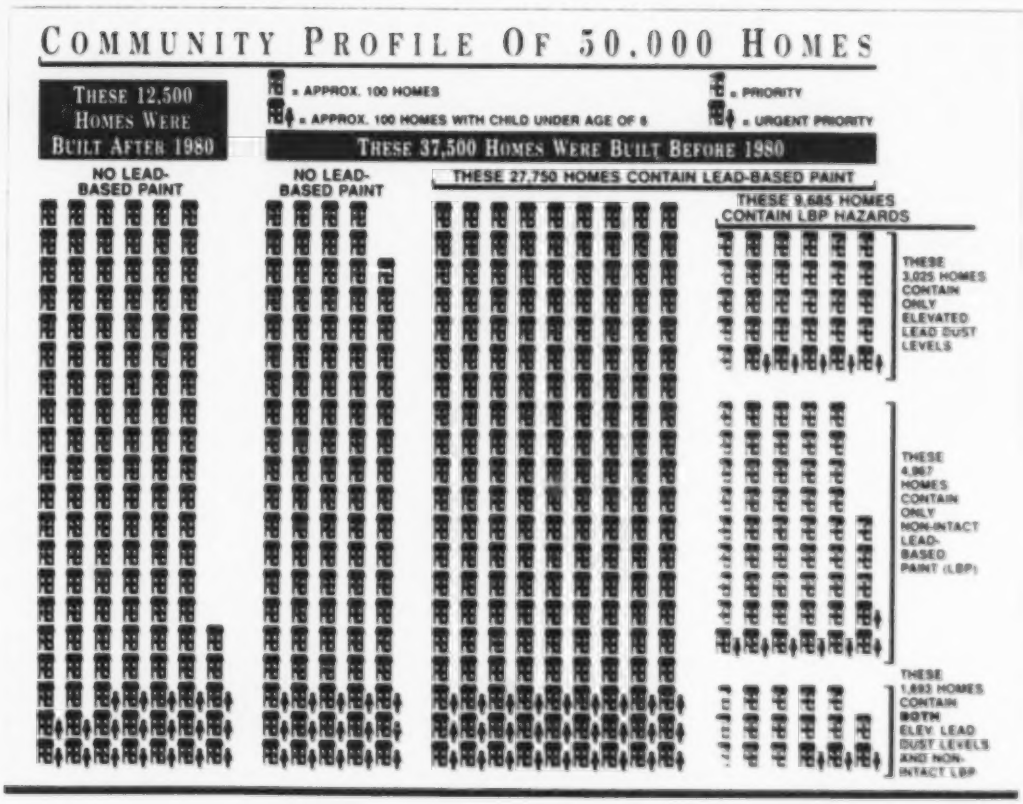
BEST COPY AVAILABLE

BEST COPY AVAILABLE

Childhood Lead Poisoning: Blueprint for Prevention *sets forth the compelling reasons why it is in everyone's interest to develop, mandate, fund, and sustain programs to combat childhood lead poisoning proactively through effective prevention. This Handbook also outlines the elements of a prevention program and contains a short bibliography and resources section.*

COPYRIGHT ALLIANCE TO END CHILDHOOD LEAD POISONING. ALL RIGHTS RESERVED.

THIS HANDBOOK WAS PREPARED BY THE ALLIANCE TO END CHILDHOOD LEAD POISONING UNDER A GRANT FROM THE U.S. ENVIRONMENTAL PROTECTION AGENCY.


COMMUNITY PROFILE OF 50,000 HOMES
THESE 12,500 HOMES WERE BUILT AFTER 1980
= APPROX. 100 HOMES
= APPROX. 100 HOMES WITH CHILD UNDER AGE OF 6
= PRIORITY
= URGENT PRIORITY
THESE 37,500 HOMES WERE BUILT BEFORE 1980
NO LEAD-BASED PAINT
NO LEAD-BASED PAINT
THESE 27,750 HOMES CONTAIN LEAD-BASED PAINT
THESE 9,685 HOMES CONTAIN LBP HAZARDS
THESE 3,025 HOMES CONTAIN ONLY ELEVATED LEAD DUST LEVELS
THESE 4,967 HOMES CONTAIN ONLY NON-INTACT LEAD-BASED PAINT (LBP)
THESE 1,693 HOMES CONTAIN BOTH ELEV. LEAD DUST LEVELS AND NON-INTACT LBP

Community Profile of 50,000 Homes (compiled from HUD and Census data)

Although ¾ of all homes built before 1980 contain lead-based paint, not all of them pose an immediate health hazard. Priorities for lead hazard control such as age and condition of housing make prevention achievable.

BEST COPY AVAILABLE

Contents

4 **We Must Break the Cycle of Lead Poisoning**

6 **A Lead Primer**

7 **Lead Poisoning Is a Problem in Your Community**

8 **Myths v. Reality**

10 **States, Localities Can No Longer Ignore Lead Poisoning**

12 **Most Poisoning Occurs in the Home**

14 **Five Ways Prevention Benefits Society**

20 **Old Program Approach v. New Program Approach**

21 **Basis of Solutions**

23 **Implementation: Pieces of the Puzzle**

28 **Resources for Prevention**

32 **Bibliography and Key Resources**

We Must Break the Cycle of Lead Poisoning

Continued poisoning ● Childhood lead poisoning is completely preventable, yet it continues to be the No. 1 environmental disease of U.S. children. ● Lead previously deposited in the environment continues to poison generations of children.

After-the-fact response ● Current programs test (screen) individual children for levels of lead in their blood and treat serious cases of lead poisoning. ● At the same time, children are repeatedly returned to environments containing lead hazards, often leading to repeated diagnoses of lead poisoning. ● As a result, prevention through source control before children are poisoned rarely occurs and the cycle of poisoning continues.

Public concern and policy ● Congress's ban on lead-based paint for residential use and the phase-out of lead in gasoline led some falsely to conclude that childhood lead poisoning had been solved. ● In fact, children continue to run the risk of exposure to lead from many sources. ● The Centers for Disease Control and Prevention has significantly lowered its threshold of concern for lead poisoning, greatly increasing the population of children recognized at risk. ● Momentum is gathering to eliminate childhood lead poisoning once and for all.

"The problem is so well defined, so neatly packaged, with both causes and cures known, that if we don't end this social crime, our society deserves all the disasters that have been forecast for it."

—Rene Dubos, 1969

An effective prevention program consists of 7 basic elements:

- *Assessing the childhood lead poisoning prevention problem in each community*
- *Educating the public about prevention*
- *Coordinating public sector lead-related programs*
- *Building constituencies through community outreach*
- *Increasing capacity for lead hazard control*
- *Prioritizing lead hazard control*
- *Leveraging private sector resources*

We can break the cycle! ● Almost all cases of lead poisoning occur when children are exposed to lead put in the environment years ago. ● Lead is no longer widely used in paint or gasoline. ● We now have the tools to clean up and control the old sources of lead contamination and eradicate childhood lead poisoning.

The stage is set for action ● National initiatives have reversed decades of federal inaction. ● The Government has officially recognized the epidemic proportions of childhood lead poisoning. ● Congress has enacted legislation setting forth manageable priorities for lead hazard control and new program requirements. ● Increased federal resources are now available to prevention programs.

Prevention brings additional community benefits ● Containment of soaring health care costs ● Creation of jobs ● Rehabilitation of housing stock and neighborhoods ● Increase in school readiness and capacity to learn ● Gain in worker and student productivity ● Reduction in environmental contamination.

The time for action is now! ● Growing recognition of the need for and benefits of prevention; expanding federal programs and pressure; multiplying liability; and increasing public awareness require states and localities to develop effective prevention programs NOW.

A Lead Primer

CHARACTERISTICS

- Lead is a natural element and does not break down in the environment. Once lead has been dispersed and redeposited in the environment, it will remain to poison generations of children unless it is controlled or removed.
- Even very limited exposures to lead are hazardous to children.

SOURCES

- As a result of the extensive use of lead over several centuries in the U.S., lead can be found in paint, dust, soil, water, air, and food.

PATHWAYS OF EXPOSURE

- Children are most commonly poisoned by lead when they ingest lead-contaminated dust from lead-based paint. The normal hand-to-mouth contact characteristic of very young children makes them especially susceptible.
- A mother with an elevated blood lead level exposes her unborn child to lead.

EFFECTS ON CHILDREN

- Children under six are most susceptible to the harmful effects of lead. They absorb lead more readily and are in a critical stage of their development.
- At low levels, lead poisoning causes reduction of IQ points, shortened attention span, hyperactivity, aggressive behavior, reading disabilities, and other learning and behavioral problems. These effects are long-term and often irreversible.
- Children with high levels of lead in their bodies require hospitalization and medical treatment. Very high lead exposures can cause mental retardation, coma, convulsions, and death.

Case Study One

Milwaukee Practice Discovers High Proportion of Lead Poisoned Children as Result of Pilot Screening

Even if there are no data on lead poisoning in your area, and no particular reason to believe that children are poisoned, it is very likely that a significant number of children are, in fact, lead poisoned. As a medical practice in Milwaukee learned, not only inner city children are at risk. A private pediatric practice that serves a mixture of urban and suburban families agreed to screen 100 children for lead poisoning at the urging of the Milwaukee Health Department. They were amazed to find that 62% of the children screened had blood lead levels greater than the CDC's threshold of concern.

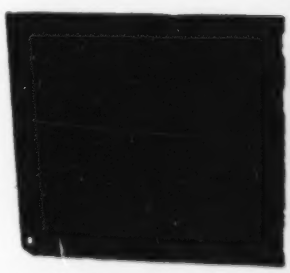
Lead Poisoning Is A Problem In Your Community

Whether you live in an urban, suburban, or rural area, chances are that a significant number of children in your city or county suffer from lead poisoning. ● Childhood lead poisoning has been officially declared the number one environmental health hazard facing America's children. ● Ten to fifteen percent (2-3 million) of all preschoolers nationwide suffer from elevated blood lead levels. This epidemic of lead poisoning is more widespread than any other preventable childhood disease.

All children are at risk of becoming lead poisoned, regardless of socioeconomic status, racial and ethnic background, or where they live (rural, urban, or suburban). ● Childhood lead poisoning is a "silent epidemic." At lower but still harmful levels only a small percentage of children who suffer from lead poisoning display obvious symptoms. Lead poisoning is virtually impossible to diagnose without a blood lead test. ● Many people mistakenly think that childhood lead poisoning does not exist in their community, when the truth is that the vast majority of cases are never detected or treated.

Myths v. Reality

MYTHS	REALITY
1. ***Children must eat paint chips in order to get lead poisoning.*** Consequently, parents are told that as long as children do not eat chips of paint or chew on painted surfaces, they are safe from harm.	→ *1.* ***Children are far more often poisoned by the ingestion of dust from lead-based paint than by eating paint chips.*** Dust covers surfaces in the home which the child touches. The dust is ingested from hand to mouth.
2. ***Only relatively high levels of exposure to lead have lasting effects on children.*** As a result, there is little need for prevention programs.	→ *2.* ***Even low levels of exposure to lead by children can cause long-term effects on learning and behavior.*** This increases the need for prevention programs.
3. ***Only children in the inner city are in danger of getting lead poisoned.*** Parents in other areas do not have to worry about their children getting lead poisoning.	→ *3.* ***Lead poisoning crosses all racial, geographic, and socioeconomic lines.*** Lead-based paint was used in most homes built before 1978. In addition, other sources of lead, such as leaded gasoline, were not restricted to use in the inner cities.
4. ***Prevention is expensive and unaffordable.*** The problem is too big to tackle. Resources for control of lead hazards are not available.	→ *4.* ***Preventive measures are affordable and resources are available.*** Setting priorities and targeting resources make the cost of prevention manageable.



Only the prevention of exposure to lead will limit the long-term effects of childhood lead poisoning.

BEST COPY AVAILABLE

Prevention avoids long-term costs of childhood lead poisoning such as increased health care and special education, making prevention far more cost-effective than reaction.

MYTHS	REALITY
5. ***Inadequate parental supervision is to blame for the poisoning of their children.*** Children are poisoned because parents do not stop them from eating lead paint.	→ 5. ***Lead, rather than parental negligence, is the cause of poisonings.*** Lead poisoning frequently occurs when toddlers engage in the perfectly normal behavior of putting hands, toys, and other objects in their mouths.
6. ***Health professionals bear the sole responsibility for solutions.*** Environmental, housing, and other personnel do not have to be primarily involved.	→ 6. ***A successful primary prevention strategy relies on an interagency, interdisciplinary approach.*** Solutions must involve many departments and disciplines — housing, environment, and health — as well as parents and community representatives.
7. ***It is more hazardous to remove lead-based paint than to leave it in place.*** Disturbance of lead-based paint creates dust and makes the problem worse.	→ 7. ***It is possible to control lead hazards using safe techniques followed by proper clean-up.*** The technology does exist, and training courses which teach safe techniques are available.
8. ***Prevention programs involve an open-ended commitment of time and resources.*** There will be a continuing need to deal with childhood lead poisoning forever.	→ 8. ***When existing sources of lead are eliminated, childhood lead poisoning will be eliminated.*** Prevention brings the end of the problem into sight.

BEST COPY AVAILABLE

States, Localities Can No Longer Ignore Lead Poisoning

Liability. State and local governments and housing authorities, as well as private landlords, are increasingly being held liable by the courts for large monetary awards to lead poisoned children. ● In addition, courts are ordering governments to develop and strengthen their childhood lead poisoning prevention programs.

Failure to qualify for funding. In the past few years, Congress has greatly increased federal grant funds to help city and state lead poisoning prevention programs through both the Centers for Disease Control and Prevention and the Department of Housing and Urban Development. ● To qualify for funding, cities and states

Baltimore rally where children dressed as canaries call attention to the common practice of using children as lead detectors, just as coal miners used canaries to detect toxic gas decades ago.

—Coalition Against Childhood Lead Poisoning

Lawsuits against States and Cities

● **Housing Authorities.** *Families of lead poisoned children have sued housing authorities in Boston; Philadelphia; Washington, D.C.; New Orleans; Wilmington; and Newark.*

● **Cities.** *Claims have been brought against New York City on behalf of children poisoned in city housing for failing to inspect and abate and for failing to provide blood lead tests for Medicaid patients.*

● **States.** *California, Texas, and Vermont have been sued for failing to provide blood lead tests to Medicaid patients. In settling its case, California agreed to develop a "cohesive program" to address childhood lead poisoning and to include blood lead screening routinely for young children under Medicaid.*

must comply with the new requirements of Title X of the Housing and Community Development Act, including a plan for addressing lead-based paint hazards as part of the Comprehensive Housing Affordability Strategy (CHAS). State and local governments must have an approved CHAS to qualify for any HUD funding.

Housing Discrimination. There is the danger that banks and mortgage companies will redline neighborhoods with a large number of homes containing lead-based paint, especially since insurance companies are becoming increasingly reluctant to cover lead liability. ● Individual landlords may also illegally refuse to rent apartments to families with young children.

Deterioration of Cities and Suburbs. Children living in homes that are not properly maintained are more at risk of being poisoned by lead-based paint. ● Neighborhoods with a high prevalence of childhood lead poisoning are a symptom of a shortage of safe and livable housing in the community.

Family. A lead-poisoned child can have devastating effects on the family. ● Families of lead-poisoned children are in need of and are increasingly demanding remedial services from local governments, including medical follow-up and special education, as well as inspections and abatement.

Most Poisoning Occurs in the Home

Lead-Based Paint. More children are poisoned by lead-based paint and paint-contaminated dust than by any other source. ● Although lead was banned from paint for residential use in 1978, the Department of Housing and Urban Development estimates that over half the U.S. housing stock contains some lead-based paint. HUD estimates that 3.8 million of those units are priority lead hazards because of the presence of deteriorating paint or high levels of lead dust, and because they are now occupied by families with young children. ● The primary source of lead exposure in the home is fine particles of lead-laden dust. Dust is

generated when paint weathers or deteriorates; when paint is disturbed, especially during renovation; when paint is abraded off friction surfaces such as windows, doors, stairways, and floors; and when moisture problems cause paint deterioration.

Other Sources: Soil in the vicinity of the home can be contaminated from flaking exterior lead-based paint or previous deposits of leaded gasoline. ● Exterior sandblasting can produce exceptionally high levels of lead in soil. Children then play in that dirt and directly ingest it, or it is tracked into the house on shoes.

Drinking water at the tap can also contain lead from pipes or solder and contribute to childhood lead poisoning, especially when contaminated tap water is used to make baby formula.

Parents who work in lead-related industries can also bring lead home on their clothes, exposing children to the hazard.

Other, less common sources include food and drink stored in leaded crystal, lead soldered cans, or lead glazed ceramicware; hobbies that involve lead; and home remedies and cosmetics that are popular in some cultures.

Five Ways Prevention Benefits Society

1. Protects Generations of Children The most straightforward and morally compelling reason for preventing childhood lead poisoning is to protect children from this insidious disease—one that robs them of their full intellectual potential and limits their ability to contribute to society. ● By greatly reducing or eliminating exposure to lead in the first place, cleaning up a single house or apartment will protect not only one child, but generations of children.

The moral imperative to protect generations of children from childhood lead poisoning is strengthened—and failure to act made inexcusable—by the fact that the disease is completely preventable.

Case Study Two

Renovation Project Poisons Child Twenty Years Later

Lead-based paint in homes can pose a continuing hazard to successive generations of children unless preventive measures are taken at the outset. Almost twenty years ago, a business executive moved his family into a "handyman special" in need of extensive work. A contractor sandblasted the exterior and renovated the interior of the house. His son has had a life marked by behavioral problems and poor scholastic performance. Recently the executive's grandson, who lives in the house, was identified as severely lead poisoned in a routine blood screening. Environmental investigations concluded that the infant was poisoned by lead dust throughout the house from the renovations completed almost twenty years ago.

2. Increases the Quality of Life and Productivity of the Individual Child, While at the Same Time Reducing The Cost to Society

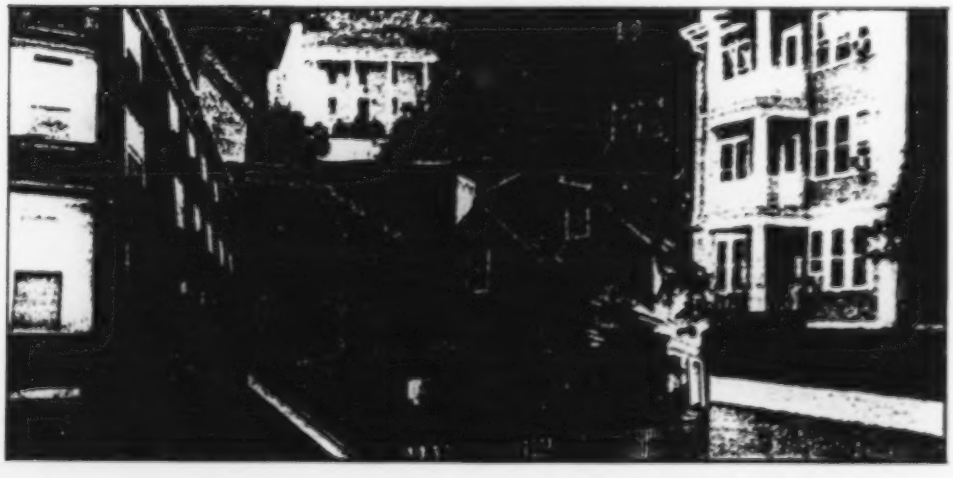
Health. Treatment and hospitalization for children with severe lead poisoning is expensive. Prevention frees up resources which would otherwise be spent on health costs for treating acute and long-term lead poisoning cases.

Lost future income. Because of cognitive deficits associated with lead exposure, a direct correlation exists between education, labor force participation, and future earnings. A loss in future income due to lead poisoning is a further expense that society must bear. Prevention of an increase in a child's blood lead level, regardless of his or her starting lead level, will result in an increase in lifetime earnings. **Education.** Studies have shown that lead poisoned children are at much greater risk of suffering from hyperactivity, learning disabilities, and behavior problems, and are much more likely to drop out of school. They are also more likely to require speech, reading, and psychological therapy.

BEST COPY AVAILABLE

3. Generates Substantial and Diverse Economic Benefits

Housing. Controlling lead-based paint hazards in housing preserves the local housing stock and strengthens neighborhoods. Addressing lead-based paint in residential buildings also creates an opportunity to improve building maintenance, including weatherization and moisture control. **Energy.** Some lead hazard control measures, such as replacing windows, reduce energy consumption. In fact, new windows pay for themselves with energy savings over time.



BEST COPY AVAILABLE

Jobs. Public demand and legal requirements for licensed inspectors and contractors and trained crews for lead-based paint abatement are already increasing. As these businesses are created and grow in response to demand, jobs are created, and the economy of the community as a whole is improved. In addition, these businesses will increase the demand for laboratories and equipment.

Increased Property Values. As a result of public awareness, hazard disclosure laws, strengthened programs, and liability potential, demand for homes free of lead hazards is growing, increasing the property values of these homes. In addition, the vigilant maintenance and property improvement that is an integral component of lead-based paint hazard control also improves home values.

4. Promotes Government Leadership

Proactive Leadership. States and localities that take aggressive steps to eliminate childhood lead poisoning can rightfully claim credit and receive recognition for forward-thinking leadership that protects future generations of children, helps build a competent and intelligent workforce, and improves housing and neighborhoods. **Administrative Effectiveness.** An effective prevention program cuts across housing, health, and environmental agencies, demonstrating agency coordination and local government effectiveness. **Additional Funding.** Childhood lead poisoning prevention offers an opportunity to obtain federal and other funding for housing rehabilitation and community improvement.

Local official receiving an award for his community leadership in preventing childhood lead poisoning.

5. Strengthens Communities and Empowers Families

Community. Childhood lead poisoning is an indicator of the overall health of the community. A confirmed low prevalence rate is an indication that members of the community have access to safe and livable housing, and an environment free of lead hazards. It is also an indicator of the overall effective-

ness of other social programs. **Family.** An essential component of prevention is community outreach and education. Giving people the knowledge they need to protect their children and the opportunity to be involved in preventing childhood lead poisoning strengthens and empowers families.

Old Program Approach v. New Program Approach

OLD PROGRAM	NEW PROGRAM
1. ***Programs based on treatment of overt symptoms and high blood lead levels,*** which assume that eating paint chips is the principal vector of childhood lead poisoning.	→ 1. ***Programs based on prevention of exposure*** to address the drastically lowered blood lead level of concern under new CDC guidelines and knowledge that lead dust is the prime cause of childhood lead poisoning.
2. ***After-the-fact response*** focused on medical case management and "tracking" of poisoned children.	→ 2. ***Pro-active approach*** focused on preventing poisoning by reducing or eliminating sources of exposure.
3. ***Program lodged in health department exclusively,*** with little or no communication or coordination among different programs or agencies, or involvement of the private sector.	→ 3. ***Housing, health, and environmental agencies working together*** in a coordinated effort, and encouraging and mandating the participation of the private sector.
4. ***Didactic ("top down") education.*** Passive education through distribution of rote material.	→ 4. ***Community mobilization,*** enlisting community participation and taking advantage of community knowledge and skills.
5. ***"Defend everything immediately,"*** all-or-nothing approach that requires full and immediate removal, often paralyzing effective response.	→ 5. ***A continuum of lead hazard responses from interim clean-up and controls through removal,*** based on risk assessment, priority setting, and taking advantage of opportunity points (such as vacancy or sale of housing).

The movement away from an old, reactive approach to prevention is gaining momentum in many cities.

BEST COPY AVAILABLE

Basis of Solutions

The key to prevention is to build a *priority-based* program that is tailored to *local circumstances* and *mobilizes private as well as public resources.* Building such a program entails six basic tasks. **Assess the Problem.** Review records, CHAS data, and census data to determine geographic concentrations of potential lead-based paint hazards in housing. **Develop Resources and Technology.** Analyze the capacity of agencies, funding sources, advocacy organizations, training programs, community organizations, labs, and contractors. **Organize Coordinating Council.** Organize and convene a coordinating council composed of government agency representatives, advocates, professionals (law, media, construction, real estate, financing), and community representatives. **Design and Implement Pilot Programs.** Implement a series of institutional and neighborhood-based programs taking advantage of national experience. The programs would include education, health, home maintenance, and training. These pilots should be evaluated to guide subsequent efforts. **Develop Skills and Capacity.** As programs are put in place, be sure the capacity to implement them exists. This entails draw-

ing on the private sector; increasing lab capacity; training abatement contractors; and coordinating services, including: health department screening, lead hazard control, code enforcement, weatherization, and environmental audits.

Involve the Entire Community. Educate, train, and help organize neighborhood groups, churches, community-based service organizations, and community development corporations. These groups, working in their neighborhood hand-in-hand with both municipal agencies and the private sector, serve as the foundation of a comprehensive and cost-effective program that prevents deterioration of cities and suburbs.

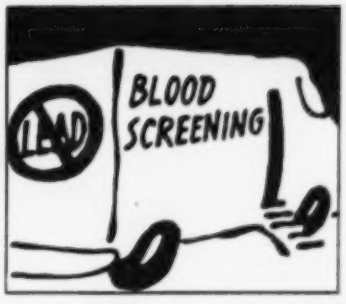
Case Study Three

NJ Task Force Effectively Coordinates Prevention

The New Jersey Interagency Task Force for Prevention of Lead Poisoning has developed a coordinated approach to prevention. The Task Force began in 1984 as a series of informal meetings between personnel from various agencies interested in taking action to prevent childhood lead poisoning. The Task Force soon expanded to include all relevant state agencies, as well as a wide range of community groups and professional associations. The Task Force has produced a common legislative agenda for prevention, established a grant program for lead hazard control in housing, and helped the state childhood lead poisoning prevention program win a multi-million dollar grant.

BEST COPY AVAILABLE

Implementation: Pieces of the Puzzle



The mayor of a hypothetical mid-size city—Mayor Middleton—decided to implement a childhood lead poisoning prevention program. Mayor Middleton first reviewed the city's existing lead programs. The Mayor found that the health department did have a childhood lead poisoning "prevention" program with dedicated staff, but it was underfunded and understaffed. The program primarily sponsored testing of children's blood for lead (screening) at a series of local health fairs.

Mayor Middleton found that the housing department did not inspect specifically for lead-based paint hazards, but did have code authority to remedy and prevent public nuisances, broadly defined. The first thing the Mayor did was to get the housing and health departments communicating with each other on a regular basis—something that had not been occurring—and to require priority housing inspections for lead in residences where screening results indicated the presence of a child with blood lead levels above the Centers for Disease Control and Prevention's threshold level of concern.

Next, Mayor Middleton identified other activities already being carried out that could be incorporated into a preven-

tion program. The Mayor discovered that the city was conducting housing weatherization and rehabilitation projects that could incorporate control of lead-based paint hazards. Also, the environmental department had sanitation crews that could be trained to conduct lead clean-ups of housing and grounds as a part of their duties. Mayor Middleton then asked the Departments of Health, Housing, and the Environment to collect and collate information about sources of lead and the extent of local prevention efforts on a continuing basis. **The Mayor formed an interagency working group** that met regularly. Subsequently, the Mayor instituted a formal interagency task force and designated one agency to oversee the coordinated program.

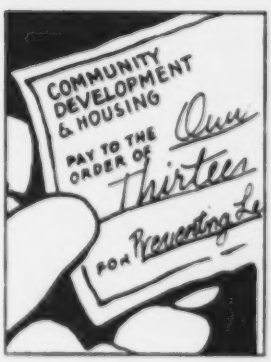
Mayor Middleton held a series of open meetings at schools and community centers, which parents, neighborhood groups, and concerned citizens attended. These meetings also served to begin building a constituency to support development of a local childhood lead poisoning prevention program.

A community liaison committee was formed to meet with the designated agency on a regular basis. The Mayor enlisted parents and advocates

for prevention as part of the committee, including a local doctor who had been voluntarily conducting blood lead screening of children for many years, as well as parents. The committee was eventually expanded to include real estate agents, rental property owners, abatement contractors, and other concerned interest groups and community members. Part of the committee's charge was to develop a community-based jobs training program for lead abatement workers.

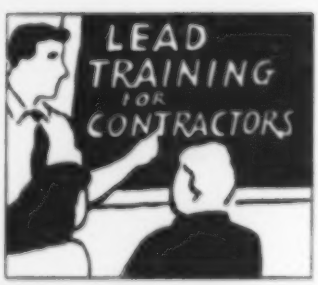
The interagency lead task force began to develop systematic priorities for lead inspections and hazard control. One of the initial responsibilities of the Task Force, under leadership from the housing agency, was to review the existing Comprehensive Housing Affordability Strategy and incorporate lead-based paint hazards into it. Neighborhoods were ranked for priority attention by such criteria as age and condition of housing stock and number of lead poisoning cases discovered. Circumstances that provide the opportunity for the most efficient lead hazard control—such as unit vacancy at sale or transfer of property—were factored into the schedules for lead inspection and lead hazard control. The interagency task force prepared priority-based lead hazard

control requirements, which authorized a range of hazard control measures and monitoring procedures.



Mayor Middleton realized that public resources were not enough: the private sector had to be brought into the process. An aggressive education campaign aimed at private health care providers emphasized the importance of screening and the fact that *all* children are at risk of being poisoned by lead. In addition, the city began to study the feasibility of providing training and licensing for abatement contractors and private housing inspectors. The fees collected from this program would be used to increase lead screening, housing inspections, and educational activities. The Mayor also met with local banks, mortgage companies, and real estate agents to discuss the best ways to ensure the availability of loans to finance lead hazard control activities and to carry out federal requirements for notice and disclosure upon the sale or rental of residential properties. The Mayor proposed an innovative program for leveraging grant money by using it for interest write-downs on home rehabilitation/lead-based paint hazard control loans.

Mayor Middleton concluded that legislative authority was needed to provide the necessary incentives to create markets and opportunities for the private sector in such areas as training, licensing, and loan programs. As a result, the Mayor ordered a review of legislative authority at the municipal and the state level to identify the revisions necessary to provide the statutory basis for a complete and enforceable prevention program. The legislative review included an evaluation of the effects of federal legislation. It concluded that in order to qualify for federal funding, the city should incorporate into its program requirements of Title X related to the inclusion of lead hazards in its CHAS and the licensing of contractors and other personnel, as well as the enforcement of lead hazard disclosure.



Mayor Middleton instituted a frequent monitoring and evaluation process from the beginning of the program to make sure it improved and responded to changing needs and circumstances. At the end of its first year, and regularly thereafter, a thorough program evaluation will be performed to provide the basis for continuing to strengthen and improve prevention efforts.

Resources for Prevention

These are some examples of funds available for childhood lead poisoning prevention in housing and other programs:

FEDERAL/HUD

Competitive grants. HUD has started a new program designed to help states and cities abate lead-based paint hazards in low-income private housing and establish licensing and training programs for the inspection and abatement industry. **Block grants.** A wide variety of activities are eligible under CDBG and HOME block grants, including physical improvements to neighborhoods, economic development, public works construction, public services, code enforcement, and housing rehabilitation. **Housing Assistance (Section 8).** Local administrators could use the tenant-based Section 8 program to encourage landlords to provide lead-safe housing. Federal law imposes a schedule for risk assessments in project-based Section 8 units. **Public housing.** Funds are available to cover both operating expenses and capital improvements in public housing units.

STATE

Appropriations. Legislative appropriations can be made for lead-based paint

abatement activities. **Dedicated Revenues.** There are many ways of generating funds for housing improvements and lead hazard control that do not require new taxes or indebtedness. Examples are surplus bond reserve funds, real estate transaction fees, and linked deposits (lenders commit themselves to residential loans in exchange for receiving deposits of public funds). **Tax-Exempt Bonds.** Federal and state tax laws permit housing finance agencies to issue tax-exempt private purpose bonds to finance below-market interest rate loans. **Tax Credits** for lead-based paint abatement can be authorized under state law.

PRIVATE CAPITAL

Market-Rate Lending to home owners can be increased through lender/borrower education and understanding of potential liability. **Interest Rate Write-Downs.** The private sector can provide loan capital at below-market rates, with private subsidies or public funds paying the difference usually at loan origination. **Deferred and guaranteed loans.** Other loan arrangements for home improvements and lead hazard control can be established, typically involving a public/private partnership. Deferred loan payments, for example,

require that only interest be repaid until the property is transferred or a set term of years passes. The government could also agree to guarantee the full amount of interest and principal on loans in the event of default, thereby broadening the class of eligible borrowers.

These are some examples of funding sources available for childhood lead poisoning prevention in health and nutrition programs:

Maternal and Child Health Block Grants serve as the principal means of support to states to maintain and improve the health of mothers and children, including children with special needs.

CDC Categorical Grants provide funds to states and localities for screening programs, medical and environmental follow-up, and education about prevention.

Medicaid EPSDT Under federal law, Medicaid's Early and Periodic Screening, Diagnostic, and Treatment Program must cover lead screening, as well as related medically necessary care. All children in Medicaid are eligible for EPSDT coverage.

Case Study Four

City Successfully Channels CDBG Funds to Lead Hazard Control Activities in Privately Owned Homes

Lynn, Massachusetts' Community Development Department (CD), with funds from its HUD Block Grant, purchased lead-based paint detectors, and the Health Department hired an inspector. At the same time, CD rewrote all its housing rehabilitation programs to require lead inspection and abatement of housing units in strict accordance with state statutes. CD provides grants to help cover the cost of abatement. In the first 3½ years of operation, 884 housing units were abated under the program, and hundreds more were abated as a result of legal requirements and market forces.

WIC regulations define lead poisoning as a nutritionally-related medical condition that can be the basis for certifying a child to receive benefits under the Supplemental Food Program for Women, Infants, and Children.

Food Stamps can be used to improve nutrition as one way to help prevent children from becoming lead poisoned. Nutritional counseling is an important part of many food subsidy and child health programs.

Head Start Although Head Start is mainly known as an education program, 99 percent of the enrolled children receive medical screening, which can include screening for lead poisoning if lead poisoning is prevalent in the community.

Compiled from: CDC, "Strategic Plan for the Elimination of Childhood Lead Poisoning"

BEST COPY AVAILABLE

Bibliography and Key Resources

Public Information

National Lead Information Center Hotline, 1-800-LEAD-FYI. The hotline is run by the National Safety Council for the U.S. Environmental Protection Agency, and provides information on lead to the general public.

Technical Assistance

National Center for Lead-Safe Housing in Columbia, Maryland provides technical assistance for lead hazard control in housing, including a guide to assist states and local governments in integrating the control of lead-based paint hazards into housing programs and strategies, *Lead-Based Paint Hazards and the Comprehensive Housing Affordability Strategy (CHAS).*

Reports

Alliance To End Childhood Lead Poisoning (227 Massachusetts Avenue, N.E., Suite 200, Washington, D.C. 20002) produces a series of reports, including: *A Framework for Action to Make Private Housing Lead-Safe; Making the Most of Medicaid; Model State Lead Law; Resources Guide for Financing Lead-Based Paint Cleanup; Understanding Title X.*

Other Reports Include:

Centers for Disease Control and Prevention (CDC). *Strategic Plan for the Elimination of Childhood Lead Poisoning.* Atlanta: U.S. Department of Health and Human Services, 1991.

CDC. *Preventing Lead Poisoning in Young Children: A Statement by the Centers for Disease Control.* Atlanta: U.S. Department of Health and Human Services, 1991.

U.S. Department of Housing and Urban Development (HUD). *Comprehensive and Workable Plan for the Abatement of Lead-Based Paint in Privately Owned Housing: Report to Congress.* Washington, D. C.: HUD, 1990.

KEY RESOURCES

Federal Agencies

U.S. Department of Housing and Urban Development (HUD)
Office of Lead-Based Paint Abatement and Poisoning Prevention

U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxic Substances

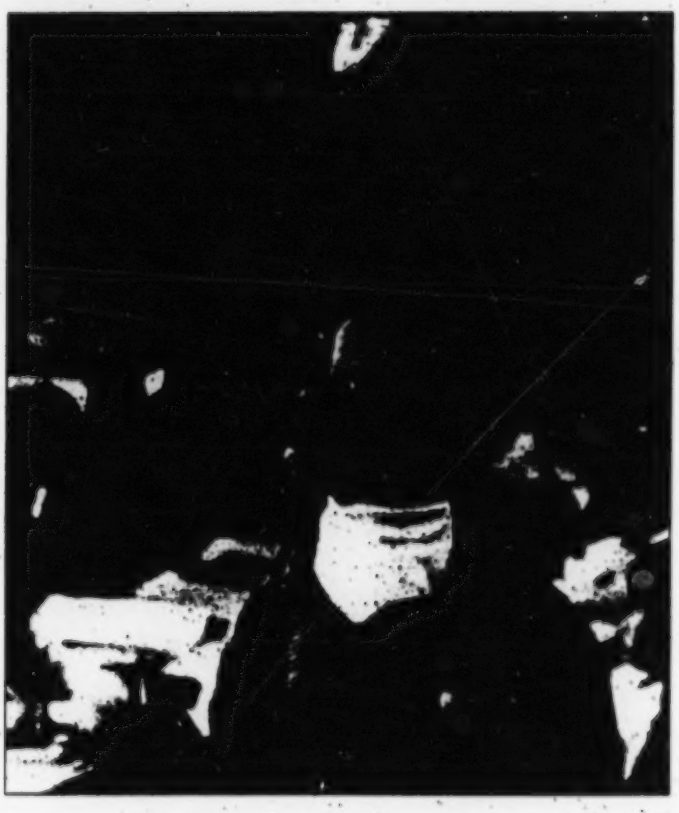
U.S. Department of Health and Human Services
Agency for Toxic Substances and Disease Registry
Centers for Disease Control and Prevention
Lead Poisoning Prevention Branch
Health Resources and Services Administration
Maternal and Child Health Bureau

U.S. Consumer Product Safety Commission

U. S. Department of Labor
Occupational Safety and Health Administration

U.S. Department of Agriculture
Farmers Home Administration

BEST COPY AVAILABLE



ACKNOWLEDGMENTS

Childhood Lead Poisoning: Blueprint for Prevention was written by K. W. James Rochow and Maria Rapuano of the Alliance To End Childhood Lead Poisoning.

We wish to thank all of those who shared their comments with u during the preparation of this volume. We especially want to thank the members of the primary prevention strategies project's technical advisor committees — unfortunately too numerous to list by name — who gave unstintingly of their time and provided crucial advice based on their con mitment and experience. Particular appreciation goes to those who provided special help developing *Blueprint for Prevention* — Dennis Livingston; Joan Luckhardt; Mark Matulef; Brad Prenney; and our designer, Carol Gerson. We also want to note our gratitude to our suppor staff — especially Sylvia White and Cynthia Massey — who successfull wrestled with the graphical complexities of this volume. The Alliance is solely responsible for its contents.

This book was made possible by a grant from the United States Environmental Protection Agency. Once again, the Alliance is solely responsible for its contents.

This Handbook complements two other booklets designed to catalyze action to develop effective childhood lead poisoning prevention programs. *Developing Prevention Programs and Mobilizing Resources* describes in more detail the program requirements outlined in this Handbook. *Resources for Prevention* provides examples of specific materials used in ongoing prevention programs.

For Additional Information. A tear-out sheet at right provides ordering information for all three volumes.

CREDITS

Design and layout. Carol Gerson of Carol Gerson Design.

Photos and graphics. Cover and pages 23-27: Anne Lunsford, Illustrator; inside front and back covers, and pages 12, 14, 19: Suzanne Szasz; page 2: Dennis Livingston and Alex Mendoza; page 8: Gebhell Hays Partners, Inc.; page 9: Childhood Lead Poisoning Intervention Program, Lynchburg, VA; page 10: Maryland Coalition Against Childhood Lead Poisoning; page 16: Design by Carol Gerson and Photos by Joan Luckhardt and Jo-Anne Parker; page 17: Jo-Anne Parker; page 18: Glen Friesen; page 22: Joan Luckhardt; page 29: Bruce Reedy.

BEST COPY AVAILABLE

ALLIANCE TO END
CHILDHOOD LEAD POISONING
227 Massachusetts Avenue, N.E., Suite 200
Washington, D.C. 20002